

REMARKS

Claims 1-32 are currently pending in the application. Claims 1 – 32 are rejected under 35 USC 103(a).

Examiner's rejections of all of the claims are respectfully traversed.

Reconsideration of the above-identified application in view of the traversal, detailed in the remarks following is respectfully requested.

Claims Rejections – 35 U.S.C. 103

1. Claims 13-21 are rejected under 35 U.S.C. 103(a) over a mosaic of *six* citations, Iwatsuki et al (US 2003/0197772) in view of Loopstra et al (US 6,262,796), Codos (US 6,755,518), Rasmussen et al (US 6,536,894), Rezanka (US 5,757,407) and Yamada (US 6,042,228).

Iwatsuki relates to a platen device for an ink-jet printer for working with textiles. As such it represents the prior art which forms the background to the present invention. Only a single platen is shown and the problem to which the present invention relates is clearly present. Iwatsuki gives no hint of a solution.

Loopstra relates to the field of semiconductor lithography. Semiconductor lithography relates to *nanometer-size features* best approached by an *electron microscope*, whereas textile printers relate to *garment size objects*. Semiconductor lithography has no relation to the present invention. That is to say it is not relevant to textile printing. The skilled person working in the field of textile printing, typically a *mechanical engineer*, would *never consult* documents relating to semiconductor lithography, which is a field generally involving *applied physicists, clean rooms, white coats and multi-million dollar budgets*. Substrate management in the two fields, one of *small rigid crystal wafers*, and the other of *large flexible fabrics*, is completely unrelated. The reference to Loopstra is totally artificial and defies all common sense.

Codos relates to printing onto rigid substrates such as car doors etc. It mentions that the rigid substrate could have a fabric surface, but does not actually relate to fabrics as such.

Rasmussen relates to heating paper to dry it prior to printing thereon with wet ink. As such it does not relate to printing of fabrics.

Rezanka relates to ink jet printers for printing on paper, and as such has nothing to do with printing of fabrics.

Yamada relates to a paper feed system, and as such has nothing to do with printing of fabrics.

Claim 13 and the Problem Solved

The present claim relates to textile printing. The skilled person starting with Iwatsuki would consider the problem that the print head is left waiting while the operator spends time folding the textile on the platter. That is to say, because of the unique problem in textile printing of idle time due to folding of the textile onto the platen, idle time of the printer exists.

This idle time due to folding is different in quality from the general interest in increasing throughput. Paper can always be fed faster but fabrics have to be folded. This issue is not addressed in *any* of the documents in the Examiner's rejection.

First Argument

As explained above, none of the remaining five citations provide a solution to the issue of *down time* of the printhead *due to* the need to fold the fabrics. While it is true that some of them do deal with more efficient use of the printhead by providing faster feed of the paper, this is not a solution to the present problem since, while paper can always be fed faster, garments must be folded manually and cannot simply be fed faster. As none of the citations solve the issue, the present claim is inventive.

Second Argument

In the alternative it is argued that the very fact that the Examiner has to cite *six* different documents, only one of which is in the field of the present invention, is in itself *proof* of inventive step. That is to say the very mosaic provided by the Examiner is proof that claim 13 is inventive.

Third Argument

Since the problem solved by the inventor is specific to textiles and none of the five supporting citations deal with *textiles at all* the skilled person would not consider

them in trying to find his solution. Since *none of them relate to textiles*, none of them even promise to the skilled person that they should be consulted to search for a solution to his problem of *down time due to the need to fold the textile on the platen*. This is because *none of them teach printing of textiles*.

Therefore the skilled person faced with the above problem would *never consider any of them*. Indeed he would *certainly* not consider Loopstra as it has nothing whatsoever to do with *any field which the mechanical engineer working on textile printing would be familiar with*, for the reasons given above.

Thus the skilled person *would never make* the mosaic of six documents that the Examiner is presenting. Even if he did he would *not appreciate* that it held a solution to his problem.

Examiner admits in connection with Loopstra that Iwatsuki fails to teach the claimed feature of:

“a second linear motion X axis stage mounted on said frame parallel to said first axis stage alongside said first axis stage for X axis motion parallel to X-axis motion of said first stage, and arranged for operation independently of said first axis stage or a second printing table assembly movable on said linear X axis stage base independently of said first printing table assembly.”

As Loopstra cannot be taken into account for the reasons given above, the claim is allowable since none of the citable prior art teaches this claimed feature.

Fourth Argument

In addition to and irrespective of the above argument, applicant asserts that there is *nothing in the present problem* that ties the above six documents together. There is *no motivation to combine* the documents since they have nothing to do with the present problem. The *only possible search* that could ever have found these six *unrelated* documents is *a search based on the present claim*.

That is to say the mosaic of six documents can only be obtained by *ex post facto analysis* with *hindsight of the present invention*. Such hindsight analysis could *not objectively have been available* to the inventors.

That is to say one could *not* find these documents based on understanding the problem. One could *only mosaic* these *six* documents together based on *actual knowledge* of the *solution*.

Fifth Argument

Applicants argued *in the previous response* that the reference of Loopstra et al is taken from a field of endeavor, semiconductor lithography, which is *distant from* the field of the present application.

Applicants pointed out in the previous response, and the response before that, that the differences between the features of printing machines and the field of semiconductor lithography are such that a person ordinarily skilled in the art of textile printing *cannot be expected* to be versed in the technology of semiconductor lithography.

Applicants in the previous response *requested the Examiner to point out* the Rationale to combine Loopstra with the other references, according to the *current Examination Guidelines for Determining Obviousness* Under 35 U.S.C. 103 in View of the *Supreme Court Decision in KSR International Co. v. Teleflex Inc.*

In KSR, The US Supreme court stated “rigid preventative rules that deny recourse to *common sense* are neither necessary under nor consistent with, this court’s case law”. Common sense *dictates* that Loopstra would not be considered by the textile printer.

Examiner *did not* point out any rationale to the contrary but merely *maintained* his rejection without comment.

The Board of Appeal in Ex Parte Owlett Appeal 20070644 decided June 20, 2007, also ex parte Erkey Appeal 20071375 decided May 11, 2007, required a reason as to *why* a particular combination suggested by the Examiner would be considered to be *conventional*. That is to say the skilled person must be able to find and consider the document without using inventive skill.

There is *no reason* in the present case why a person working in the field of textile printing would *conventionally* consider art from the semiconductor field. That is to say the Examiner is required to provide *motivation* for considering a distant field, in *addition* to providing the motivation to combine.

Examiner *is again asked*, if he wishes to continue to cite Loopstra, to point out the rationale for a mechanical engineer familiar with the world of textile printing to consult documents in the field of semiconductor lithography, bearing in mind that semiconductor lithography is carried out in clean rooms in multi-million dollar facilities by applied physicists. This reasoning should be consistent with the Supreme Court decision in KSR and consistent with the board of appeal decisions cited above.

If the Examiner feels unable to provide such reasoning he is asked to withdraw this reference.

Sixth Argument

Even if Loopstra is included in the mosaic, the differences between the requirements of the semiconductor field, with requirements for microscopic precision, and the textile printing field where objects of garment size are considered, are such that *no relationship would be apparent to the skilled person* in any event.

Thus for example, in the field of Loopstra et al, while two object holders are mentioned, both the object holder and a printing device *must be static* during printing. The printing is typically performed by *a flash of light*. In the field of printing on textiles, the printing is performed by *moving the printing table* under the inkjet nozzles during the application of ink.

As a further example, in Loopstra, an equivalent of the array of inkjet nozzles is an imaging or projection system (focusing unit 5 and optical lens system 17 of Fig. 1 in Loopstra). Loopstra does not teach moving the imaging or projection system. If movement occurs, it occurs while stepping between exposures. In the present invention, there occur “back and forth movements” “during said applying”. This is recited in the claims.

In summary, Loopstra belongs to a *technologically different field* which does *not* teach “applying ink”, and does *not* teach “back and forth movements” “during said applying” and is carried out by *different* people who have studied *different* subjects and work for different organizations and different *kinds* of organizations.

Thus even though Loopstra teaches two object holders, the present *motivation* is to *overcome down time due to folding the textile onto the platen*. No such issue arises in

Loopstra, who *in his clean room and with his semiconductor crystals*, does not have to deal with *folding*.

Hence the skilled person would never have considered Loopstra for *two independent* reasons, 1) because it is in a completely *different* field, 2) because it does *not* teach a solution relevant to *down time while folding articles on a platen*.

Seventh Argument

Examiner argues various motivations for inclusion of each of the documents in the ex-post facto mosaic he has made against the claims.

The inclusion of Loopstra is “in order to be able to process simultaneously and independently two objects to increase the throughput of the apparatus”.

The inclusion of Codos is “to cure the ink upon its contacting the substrate to prevent ink spreading and wicking..”

The inclusion of Rasmussen is to “provide a flat and stable media for printing in order to improve image quality”

The motivation for including Rezanka would be “to increase printing speeds”.

The motivation for including Yamada would be “to be able to print on different objects by one inkjet printhead assembly”.

However these aims are *mutually contradictory*. The skilled person according to these aims both intends to increase speed by printing two different objects and yet do so with a single printhead.

The skilled person would not look to solve *six different problems simultaneously* including *two* of which are *clearly contradictory*. Anyone doing so would by definition have made an invention.

Thus for this reason as well, claim 13 is novel and inventive. This conclusion is the correct conclusion based on the *actual reasoning provided by the Examiner*.

That is to say it is respectfully submitted that the different motivations, including contradictory motivations, provided by the Examiner in trying to find prior art against the claim are *in themselves proof of inventive step*.

Argument 8

None of the citations in the mosaic even hint at the existence of the *problem* of downtime due to the need to fold the fabric, never mind solve the problem as pointed out above. Therefore it is submitted that claim 13 is allowable over the artificial mosaic of six prior art documents for this reason as well.

Note this is not the same as argument 1. Argument 1 related to the documents all lacking the solution. Argument 8 relates to the documents all lacking any hint at the problem.

General

Claim 13 is thus believed to be allowable, *inter alia* for *any* one of the *eight* reasons given above, taken alone, and furthermore for each combination of these reasons.

Examiner is respectfully reminded that he must either refute *each reason alone* and *all the combinations* of the reasons *or* he must allow the claim.

Regarding claims 1 and 22.

Furthermore, claims 1, and 22, are also believed to be inventive over the cited references since their rejection *also* relies on Loopstra, which is not citable for the reasons given above, and they also solve the problem of utilization of the printhead despite downtime due to folding of the fabrics, where neither the problem nor solution is taught or hinted at in any of the cited documents.

Independent claims 1, 13, and 22, are thus believed to be inventive over the cited references for this additional reason.

The dependent claims rejected in the above-mentioned rejections, claims 14-21, are deemed allowable by virtue of their parent claim 13.

The dependent claims are deemed allowable by virtue of their parent claim 1.

Summary of the Traversal

The claims are rejected over a mosaic of documents that do not relate to textile printing. The *only search* that could ever have combined these documents was one *based on knowledge of the claim*. Therefore the search represents *ex post facto analysis*.

Irrespective of the above, none of the documents teaches or hints either the problem of or any solution to *downtime of the print head while the textile is being folded on the platen*. Therefore even if the above combination had been made, it would *not* have been recognized as relevant by the skilled person.

While some of the citations do suggest improved throughput of *paper*, this does not solve the instant problem, because paper does not have to be *manually folded* onto the platen, a process which *cannot* be speeded up.

Irrespective of the above, the citation to Loopstra is from an *unrelated* field which the skilled person *in the field of textile printing* would *never* consult. The rule of common sense cited by the Supreme Court in KSR *does not allow* for Loopstra to be cited at all.

The inability to cite Loopstra means that the second stage feature of the claims is *not found* in the prior art.


Irrespective of the above, the citation to Loopstra does *not* teach a solution to the issue of downtime of the printhead during folding of the textile, since the problem of folding of a textile does not arise in this document.

Irrespective of the above, the motivations for combining the different documents require the skilled person to solve *five different problems simultaneously* including problems that are *mutually contradictory*. The skilled person would *never* be capable of making such a combination.

In this respect, and irrespective of the above, the Examiner's own reasoning regarding these different motivations is cited as *proof of inventive step*.

In view of the foregoing, it is respectfully submitted that the case for allowance is overwhelming. All the claims now pending in the application are allowable over the cited references. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,


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Enclosures:

- Petition for Extension of Time (Two Months)